

Application No.: 10/716,767

Reply in response to Office Action mailed December 13, 2005

### REMARKS

Applicant respectfully requests that the Examiner reconsider the presently pending claims in view of the preceding Amendments and following Remarks. Claims 1-26 are cancelled. New claims 27-46 are submitted.

#### **1. Double Patenting Rejection**

The Patent Office rejects claims 1-26 on the grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-14 of U.S. Patent No. 6,972,148 (Janssen), in view of U.S. Patent No. 5,073,365 (Katz *et al.*).

Although the Janssen' 148 patent describes an elastomeric article with a plurality of beads having a vinyl group, that patent, as the Patent Office correctly notes, fails to teach that the beads are porous or impregnated with treatment, and any double patenting obviousness rejection requires a second reference to so-called "bridge the gap" between the Janssen' 148 patent and Applicant's current invention. Applicant's claimed invention in the present application differs from the glove article described by Katz *et al.* Applicant claims an article with beads that have functional or reactive groups (in particular vinyl groups) at their surface to covalently bind the beads with structural matrix of the elastomer substrate or a coating layer thereon. In contrast, Katz *et al.* create beads using emulsion polymerization that are "substantially completely free from reactive groups." (Col. 7, lines 4-16.) Further, Katz *et al.* describe entrapping the beads physically or mechanically in the body of their elastomer. Beads that are absent surface reactive groups can not form strong chemical bonds with their surrounding elastomer matrix. Unlike chemical binding, mere physical or gross entrapment does not secure the beads within the substrate matrix and can not effectively prevent them from popping out when the elastomer body is flexed, extended or stressed. When beads break free from the elastomer substrate, for instance, a user will experience a noticeable and significant difference in the donning properties of the finished glove article. Therefore, because it does not involve particles with reactive groups for chemical bonding, Katz *et al.* teach away from the present invention. Hence, it is not proper to combine with the Janssen' 148 patent. A person of ordinary skill in the art would not look to such a reference to intimate an invention that employs reactive groups on particles.

Applicant requests that the Patent Office hold in abeyance the present rejection until any claimed subject is allowable. At that time, Applicant would be willing to submit a terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) to overcome a double patenting issue, if any.

#### **2. §103 Rejections**

The Patent Office rejected claims 1, 4-17, and 19-24, under 35 U.S.C. §103(a) as being unpatentable over Wang *et al.* (U.S. Patent No. 6,638,587) in view of Katz *et al.* (U.S. Patent No. 5,073,365). The Patent Office further rejects claims 1-26 under 35 U.S.C. §103(a) as being unpatentable over Matsuura *et al.* (U.S. Patent No. 6,641,879).

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The Patent Office has not satisfied the burden for a *prima facie* case of obviousness. Neither the Katz '365 nor Wang '587 patents either viewed together or in combination with the Matsuura '879 patent suggest the claimed invention. The Patent Office has selectively read certain passages of the references for claim elements, which appear to be similar to Applicant's claimed invention, but which upon closer inspection does not make Applicant's invention obvious.

As mentioned above, the references that the Patent Office has cited teach either a main body substrate surface that needs to be modified with a silicone coating to induce some form of chemical affinity for silicone particles (Wang *et al.*), or beads that do not have a functionalized surface (Katz *et al.*). An important difference between Applicant's claimed invention and the references is the presence of particle beads that have a functionalized or reactive surface, which form real bonds with the substrate matrix or coating. (Applicant's Specification, p.7, lines 22-27.) The Wang '587 patent discloses coating a substrate surface with an aqueous dispersion of a silicone-modified polymer to change the chemical properties of the substrate so that the surface has a greater affinity between silicone substituents of the coating and silicone resin particles. The Wang reference teaches an example of adhesive chemistry in which like materials attract each other or have an affinity for itself. Like-attracted-to-like material is an association analogous to the observed manner that "cling wrap" film tends to stick to itself. Treating a substrate surface to modify its surface properties is common in elastomer-related art, but modifying the particle beads is not. Modification of the particle bead surface, however, is different and can be complex. In the claimed invention, the functionalized beads can form a covalent bond with an unmodified elastomer substrate or a donning coat, without need to adapt or modify the surface to suite the bead material, as the Wang substrate does. The references does not disclose or teach a way of modifying the bead. Absent such disclosure, a person of ordinary skill would not be motivated to develop functionalized surface for beads that are chemically non-reactive.

As Applicant has pointed out in the previous section, above, the patent by Katz *et al.* teaches away from the present invention. A mere reading of the two references would not lead a person of ordinary skill in the art to appreciate or reveal the chemical bonding between the functionalized bead particles and an unmodified substrate. One of ordinary skill would not have been motivated to combined the two references. The courts recognize that an invention will not be deemed obvious when one or more of the combined references "teach away" from the claimed invention. Hence, the *prima facie* case of obviousness based on the combination of the Wang and Katz patents can not stand.

Turning to the Matsuura'879 patent, Patent Office appears to have taken the view that the mere presence of a crosslinking agent will inherently or necessarily bind acrylic particles with the acrylic substrate body, but has not shown this belief to be supported. Rather, the Patent Office has misconstrued the teaching. The Matsuura'879 patent discloses an elastomeric glove having a substrate body formed of an acrylic resin emulsion, and organic filler including a plurality of microparticles or beads to improve the lubricity of the internal surface. The presence of crosslinking agents is not to bind the particles, but rather as the Matsuura patent states, "the acrylic resin glove body and the interior surface of the acrylic resin glove can be simultaneously crosslinked, thereby improving yje adhesion

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between the interior surface treating agent layer and the acrylic resin glove body." (Col. 5, lines 28-40; see also lines 20-27.) It appears that the main concern of Matsuura et al., was to prevent delamination of the interior treatment layer, and not to bind particles. The fact that the microparticle or beads are used as filler connotes to one of skill in the art that these particles are or should be chemically inert. If examiner has any other further information which may link the propositions, Applicant requests that the information be shown.

Moreover, the larger size of the particles used in the Matsuura patent (3-10  $\mu\text{m}$ ) as compared to the particle sizes of Applicant's claimed invention (0.01-0.5  $\mu\text{m}$ ) can affect the overall characteristic of the surface. Indeed, Matsuura et al. explicitly state that "when the average particle diameter is lower than the above range, it becomes impossible to impart sufficient lubricity to the interior surface of the acrylic resin glove. Therefore, there is a fear that it becomes impossible to impart good fitting and detaching feel to the acrylic resin glove." (Col. 9, lines 49-55.) This statement, rather than making Applicant's invention obvious, actually teaches away from the claimed invention. As stated above with respect to the patent by Katz et al., a careful reading of the reference does not motivate or suggest to one of skill that one can combine the two references when one teaches away, let alone either a single or two references that teach away.

For the foregoing reasons, Applicant respectfully requests that the present rejections be withdrawn.

### 3. Conclusion

In view of the amendments and remarks, above, Applicant respectfully submits that all of the presently presented claims are in condition for allowance.

Applicant believes that a three (3) month extension of time makes the present Response timely, but should Applicant be in error, Applicant respectfully requests the Office grant such time pursuant to 37 C.F.R. 1.136(a) as necessary to make this response timely, and hereby authorizes the Office to charge any necessary fee or surcharge with respect to time extension to the Kimberly-Clark Worldwide, Inc. deposit account number 11-0875.

Please direct any questions or comments to Vincent T. Kung at: tel. 770-587-8606.

Respectfully submitted,

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### CERTIFICATE OF TRANSMISSION

I, Laura L. Rubino, hereby certify that on Thursday, June 1, 2006 this document is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. (571) 273-8300.

By: 

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